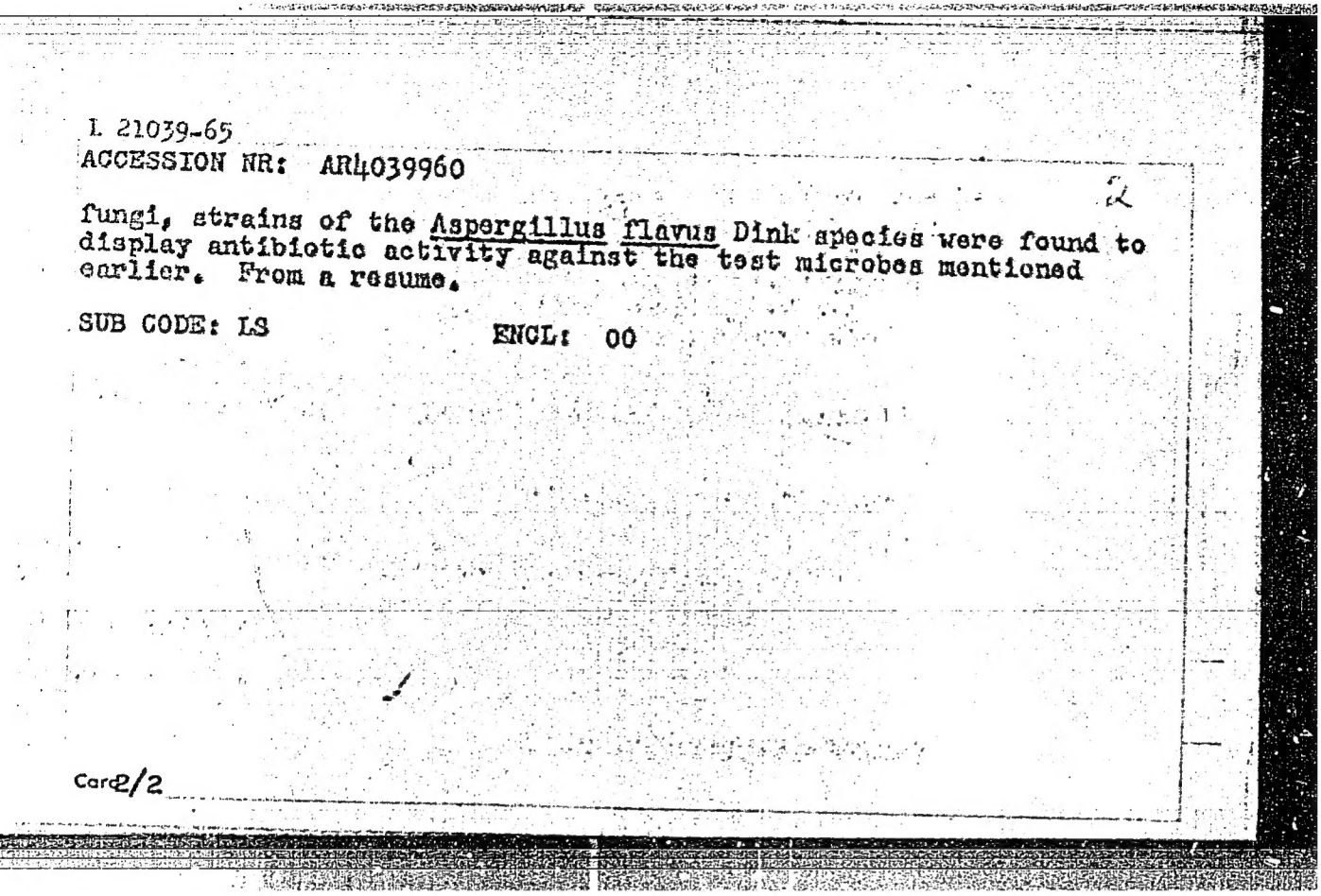

L 21039-65
ACCESSION NR: AR4039960

fungi, strains of the Aspergillus flavus Dink species were found to display antibiotic activity against the test microbes mentioned earlier. From a resume.

SUB CODE: LS ENCL: 00

Card 2/2

L 21042-65 Pb-4/Pa-4 AFWL/AMD/APGC(c)
ACCESSION NR: AR4039957 S/0299/64/000/009/B023/B023

SOURCE: Ref. zh. Biol. Sv. t., Abs. 9B172

AUTHOR: Krichevskaya, M. Z.

TITLE: Soil fungi of the Chaetomium genus and their antagonistic activity

CITED SOURCE: Sb. Materialy* 3-y Nauchn. sessii Leningr. in-ta antibiotikov, 1963. L., 1963, 40-41

TOPIC TAGS: fungus, soil, Chaetomium, bacteria, antibiosis, bacteriology

TRANSLATION: 2,303 fungi strains were isolated from 179 soil samples. Fungi of the Chaetomium genus were represented by 30 strains; they were related to 4 species (Chaetomium spirochaete, Ch. fieberi, Ch. perlucidum, and Chaetomium sp. nova). Ch. spirochaete (8 strains) displayed activity against some gram-positive bacteria, acidoresistant Bacillus B5 and fungi. Ch. perlucidum inhibited the development of Cladosporium herbarum (phytopathogenic fungus). Ch. fieberi (one

Card 1/2

L 21042-65
ACCESSION NR: AR4039957

2

strain) displayed activity against Bac. subtilis. From a resume.

SUB CODE: LS ENCL: 00

Card 2/2

L 17420-63 EWP(j)/EPF(c)/EWP(q)/EWT(m)/BDS AFFTC/ASD Pc-4/Pr-4
RM/WW/JD/JW/MAY/JG
ACCESSION NR: AP3004341 S/0078/63/008/008/1806/1808

AUTHORS: Krichevskaya, O. D.; Belozerskiy, N. A.; Segal', L. D.; Kolobova, N. Ye.; Anisimov, K. N.; Nesmeyanov, A. N.

TITLE: Kinetics of thermal decomposition of solid metal carbonyl compounds

SOURCE: Zhurnal neorganicheskoy khimii, v. 8, no. 8, 1963, 1806-1808

TOPIC TAGS: carbonyl, solid carbonyl, molybdenum, manganese cyclopentadienyl-carbonyl

ABSTRACT: Authors show the dissociation of solid carbonyl compounds: molybdenum carbonyl $Mo(CO)_6$ and manganese cyclopentadienyltricarbonyl $C_5H_5Mn(CO)_3$. The thermal decomposition of molybdenum carbonyl vapors $Mo(CO)_6 \rightarrow Mo + 6CO$ takes place with an increase of volume six times the original value. A special manometer was used to accurately measure the kinetics of thermal decomposition. It was shown that both reactions of the above compounds follow the first law. The activation energy was calculated from a graph. The value for $Mo(CO)_6$ was found to be E = 17.5 kcal/mole and for $C_5H_5Mn(CO)_3$, E = 17.9 kcal/mole. Orig. art. has: 7 figures and 1 table.

ASSN: STATE INSTITUTE FOR NICKEL INDUSTRY PLANNING; INSTITUTE OF ORGANOELEMENTAL COMPOUNDS, ACADEMY OF SCIENCES, SSSR.

Card 1/2

KRICHEVSKAYA, P., inzh.

Erecting vibrated partition panels. Stroitel' no.6:7 Je '59.
(MIRA 12:9)

(Walls) (Gypsum)

KRICHEVSKAYA, P., inzh.

Assembling roofs of vibrated rolled panels. Stroitel' no.5:22 My '60. (MIRA 13:9)
(Concrete slabs) (Roofs, Concrete)

KRICHEVSKAYA, S. Ya.

KRICHEVSKAIA, S. IA., POPOVA, D. N.

On the question of oral administration of penicillin to infants during the first six months. Vopr. pediat. 18:5, 1950. p. 6-9

1. Of the Department of Hospital Pediatrics (Head -- Prof. A. F. Tur) and of the Department of Microbiology (Head -- Prof. V. N. Berman), Leningrad State Pediatric Medical Institute (Acting Director -- Prof. Yu. A. Kotilov).

CIML 20, 3, March 1951

L 41184-65

ACCESSION NR: AP4044343 S/0286/64/000/013/0081/0081

AUTHOR: Vishnevskiy, A. P.; Krichevskaya, V. L.; Sigorskiy, V. P.; Sitnikov, L. S.; Utyakov, L. L.

TITLE: An accumulating impulse counter. Class 42, No. 163810

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 13, 1964, 81

TOPIC TAGS: impulse counter, capacitance, spectrotron

ABSTRACT: This Author Certificate presents a capacitive accumulating impulse counter (see Fig. 1 of the Enclosure), utilizing a spectrotron as an element for fixing the position of the circuit. This feature enlarges the frequency range of the impulse count and maintains sustained stability in counting infrequent and random impulses. Orig. art. has: 1 figure.

ASSOCIATION: Institut matematiki i vychislitel'nykh tsentr Sibirskogo otdeleniya AN SSSR (Institute of Mathematics and Computer Center, Siberian Division, AN SSSR)

SUBMITTED: 20Mar63 ENCL: 01

SUB CODE: EC NO REF SOV: 000 OTHER: 000

Card 1/2

L 41184-65
ACCESSION NR: AP4044343

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ENCLOSURE: 01

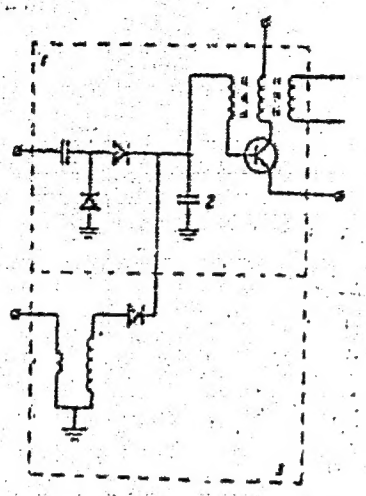

Fig. 1. 1- counter; 2- capacitance; 3- spectrotron.

Card 2/2

L 20937-66 EWT(1)/EWA(h)

ACC NR: AP6002563 (A) SOURCE CODE: UR/0286/65/000/023/0058/0059

AUTHORS: Vishnevskiy, A. P.; Krichevskaya, V. L.; Tarasov, A. A.

ORG: none

TITLE: Reversible pulse counter. Class 42, No. 176716 [announced by Institute of Mathematics SO AN SSSR (Institut matematiki SO AN SSSR)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 23, 1965, 58-59

TOPIC TAGS: pulse counter, computer circuit

ABSTRACT: This Author Certificate presents a reversible pulse counter containing a shift pulse shaper in each digit and a device for changing the count direction. To simplify the reversible counter circuit, each digit of the pulse counter is made on a storage register. The input of the storage register is connected to the first output of a limiter, and the output is connected through an inverter to the first input of the first coincidence circuit (see Fig. 1). The second input of this coincidence circuit is connected to the first output of the reverse device, and the third input is connected to the second output of the limiter and to the first input of the second coincidence circuit. The second input of the

Card 1/2 UDC: 681.142.07:621.374.32

ACC NR: AP6002563

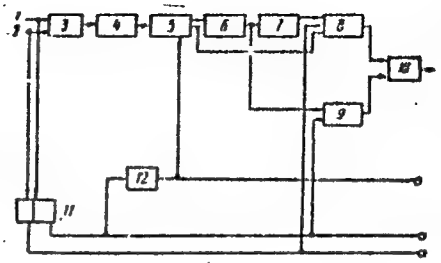

Fig. 1. 1 - Forward count pulse input; 2 - backward count pulse input; 3 - "OR" circuit; 4 - delay line; 5 - limiter; 6 - storage register; 7 - inverter; 8 and 9 - coincidence circuit; 10 - "OR" circuit; 11 - trigger with separate inputs; 12 - emitter follower.

second coincidence circuit is connected to the second output of the reverse device. The outputs of the coincidence circuits are connected to an "OR" circuit. One input of the limiter of each digit is connected to the reverse device. The limiter input of the least significant digit is connected through an "OR" circuit and delay line to the buses for the addition and subtraction input pulses. Orig. art. has: 1 diagram.

SUB CODE: 09/ SUBM DATE: 10Mar64

Card 2/2 FW

ACC NR: AR6032067 SOURCE CODE: UR/0271/66/000/007/B030/B030

AUTHOR: Krichevskaya, V. L.; Litvinchuk, N. I.

TITLE: Synthesis of logic circuits using semiconductor harmonic-frequency elements (spectrotrons)

SOURCE: Ref. zh. Avtomatika, telemekhanika i vychislitel'naya tekhnika, Abs. 7B214

REF SOURCE: Sb. Poluprovodnik. elementy v vychisl. tekhn. M., 1965, 128-135

TOPIC TAGS: logic circuit, logic element, spectrotron, harmonic frequency element

ABSTRACT: A high-stability logic element (a spectron using internal feedback) is examined and the possibility of accomplishing logic functions by using a harmonic frequency representation of variables is studied. The spectrotron utilizes a circuit which is returned at the resonant-circuit frequency. The number of stable states is determined by the number of spectral components which get into the circuit retuning band. The operation of such a circuit is characterized by the following

Card 1/2 UDC: 681.142.67:621.382

ACC NR: AR6032067

three time cycles: 1) transmission of the "overshoot" signal, which prepares the spectrotron for the reception of information; 2) supply of information to the inputs with simultaneous cessation of the "overshoot" signal; 3) at the moment when transmission of information is ended, a supply voltage whose spectrum contains 2 components with frequencies f_1 and f_2 is transmitted to the spectrotron. The supply voltage sustains the stable state into which the spectrotron was set under the action of the information signal. The various logical elements which can be obtained on one spectrotron are investigated. It is shown that a full logic system may be realized by means of two spectrotrons. The original has 7 illustrations and 2 tables. [Translation of abstract]

SUB CODE: 09/

Card 2/2

[redacted]SKAYa, Ye., kand. tekhn. nauk

Cold asphalt waterproofing for built-up roofs. Zhil. stroi. no.9: 12-13 '64. (MIRA 17:12)

FOLOMIN, A., doktor tekhn.nauk; KRICHEVSKAYA, Ye., kand.tekhn.nauk; KLEPATSKIY, G., inzh.

New instructions for designing roofs without attic floors. Zhil.stroi. no.12:26-29 '64. (MIRA 18:2)

KRICHEVSKAYA, Ye., kand.tekhn.nauk

"Breathing" waterproofing cover. Zhil. stroi. no.11:31-32 '65.
(MIRA 18:12)

KRICHEVSKAYA, Ye. G.

Krichevskaya, Ye. G. - "Analysis of materials from the Institute's Polyclinic for 1947," Trudy Rost. rentgeno-radiol. i onkol. in-ta, Issue 2, 1948, p. 12-18

SO: U-3566, 15 March 53, (Letopis 'Zhurnal 'nykh Statey, No. 14, 1949).

[illegible], Ye

I

Tekhnicheskaya ekspluatatsiya i remont ploskikh krysk grazhdanskikh zdaniy (Technical improvement and repair of flat roofs of municipal buildings) Moskva, Izd-vo Ministerstva Kommunal'nogo Khozyaystva RSFSR, 1953. 64 p. illus., diagrs., "Literatura" p. (66)
At head of title: Akademiya Kommunal'nogo Khozyaystva.

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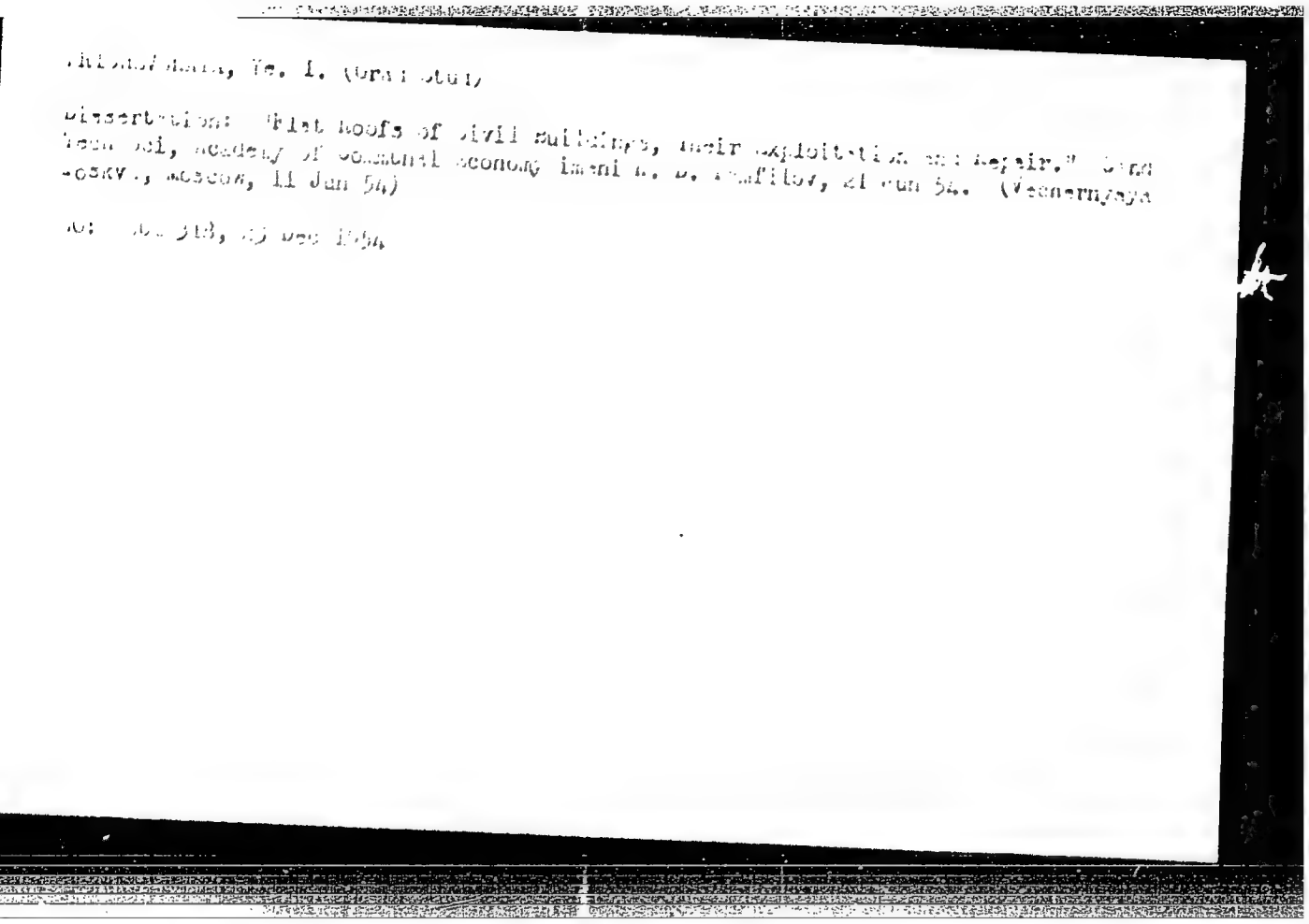


[illegible], Ye. I. (Orel Stu)

Dissertation: "Flat roofs of civil buildings, their exploitation and repair." Sci Tech Sci, Academy of Communal Economy imeni K. D. Pamfilov, 21 Jun 54. (Vechernyaya Moskva, Moscow, 11 Jun 54)

SO: [illegible], 23 Dec 1954.

KRICHEVSKAYA, Ye.I., kandidat tekhnicheskikh nauk.

Erecting industrial buildings of precast reinforced concrete.
Opyt stroi. no.5:54-74 '56. (MLRA 10:4)
(Precast concrete construction)
(Factories)

KRICHEVSKAYA, Ye.I. kandidat tekhnicheskikh nauk.

Prestressed crosties abroad. Opyt stroi. no.6:96-127 '56.
(Railroads--Ties, Concrete) (MLRA 10:4)

KRICHEVSKAYA, Ye.I., kandidat tekhnicheskikh nauk.

New standard plans for precast reinforced concrete one-story industrial buildings. Opyt stroi. no.7:44-60 '56.
(MLRA 10:4)

(Precast concrete construction)
(Industrial buildings)

KRICHEVSKAYA, Ye.I., kandidat tekhnicheskikh nauk.

Precast reinforced concrete poles for transmission lines.
Biul.stroi.tekh.13 no.8:38-42 Ag '56. (MLRA 9:10)

1.TSentral'nyy institut informatsii po stroitel'stvu.
(Electric lines--Poles)

KRICHEVSKAYA, Ye.I., kandidat tekhnicheskikh nauk.

Precast reinforced concrete construction of the casting yard area of the no.1 BIS furnace of the Stalin metallurgical plant. Biul.stroi. tekh.13 no.11:11-15 N '56. (MLRA 10:1)

1. TsNIIS Akademii stroitel'stva i arkhitektury SSSR.
(Blast furnaces) (Precast concrete construction)

NOVIKOV, I.I., kand.iskusstvovedeniya arkh.; MANDRIKOV, A.P., kand.tekhn. nauk; SEDOV, A.P., kand.arkhitektury; KONYUSHKOV, A.M., kand.tekhn. nauk; SOKOLOV, Ye.B., kand.arkhitektury; SHATSKIY, Ye.Z., kand. tekhn.nauk; KRICHEVSKAYA, Ye.I., kand.tekhn.nauk; SHLEINA, L.A., kand.tekhn.nauk; KOVEL'MAN, I.A., kand.tekhn.nauk; AGASYAN, A.A., kand.tekhn.nauk; USENKO, V.M., kand.tekhn.nauk, nauchnyy red.; NARSKOV, I.M., inzh., nauchnyy red.; YUDINA, L.A., red.izd-va; PECHKOVSKAYA, T.V., tekhn.red.

[Building practices in the peoples' democracies. Based on reports by delegations of Soviet biulders] Opyt stroitel'stva za rubezhom; v stranakh narodnoi demokratii. Po materialam ochetov delegatsii sovetskikh spetsialistov-stroitelei. Moskva, Gos. izd-vo lit-ry po stroit. i arkhit., 1957. 253 p. (MIRA 11:4)

1. Sotrudniki TSentral'nogo instituta nauchnoy informatsii po stroitel'stvu i arkhitekture Akademii stroitel'stva i arkhitektury SSSR (for Novikov, Mandrikov, Sedov, Konyushkov, Sokolov, Shatskiy, Krichevskaya, Shleina, Kovel'man, Agasyan)
(Building)

KRICHEVSKAYA, Ye.I., kand.tekhn.nauk.

Experimental demonstration construction of large-block slag-concrete apartment houses in Stalino. Opyt stroi. no.8:3-32 '57. (MIRA 11:1)
(Stalino--Apartment houses)
(Precast concrete construction)

KRICHEVSKAYA, Ye.I., kand. tekhn. nauk.

Flat roofs used as heliports. Biul. stroi. tekh. 14 no.9:33-35 S '57. (MIRA 10:12)

1. TSentral'nyy nauchno-issledovatel'skiy institut stroitel'stva Akademii stroitel'stva i arkhitektury SSSR.
(Roofs) (Heliports)

KRICHEVSKAYA, Ye.I., kand.tekhn.nauk

Sloping precast reinforced concrete roofs of apartment houses and public buildings abroad. Opyt stroi. no.12:61-95 '58. (MIRA 12:2)

(Roofing, Concrete)

KRICHEVSKAYA, Ye.I., kand. tekhn. nauk.

New types of flat roofs abroad. Biul. stroi. tekh. 15 no.5:30-33 My '58. (MIRA 11:6)

1. TSentral'nyy nauchno-issledovatel'skiy institut stroitel'stva Akademii stroitel'stva i arkhitektury SSSR.
(Roofing, Concrete)

KRICHEVSKAYA, Ye.I., kand.tekhn.nauk

Using large coarse porous sandless blocks in building apartment houses in the Far North. Buil.stroi.tekh. 15 no.11:36-39 N '58. (MIRA 11:12)

(Pechenga District--Apartment houses)

KRICHEVSKAYA, Ye.I., kand.tekhn.nauk

Constructing the main building of the tire plant in Krasnoyarsk.
Opyt stroi. no.16:51-84 '58. (MIRA 11:9)
(Krasnoyarsk--Industrial buildings)
(Krasnoyarsk--Precast concrete construction)

KRICHEVSKAYA, Ye. I.

KUZNETSOV, G.F.; KHLUSOV, I.Ye., kand.tekhn.nauk; SHOLOKHOV, V.G., inzh.. Prinimali uchastiye: AKBULATOV, Sh.F., kand.tekhn.nauk; KRICHEVSKAYA, Ye.I., kand.tekhn.nauk; DOROKHOV, A.N., inzh.; NIKIFOROV, I.A., kand.tekhn.nauk; BOGDANOV, B.N., inzh.; AVRUTIN, Yu.Ye., inzh.; VISHNEVSKIY, N.D., inzh.; ARIYEVICH, E.M., kand.tekhn.nauk; LEVITAN, Ye.P., inzh.; TUPOLEV, M.S., prof., doktor arkhitektury. TEMKIN, L.Ye., inzh., red.; KHAVIN, B.N., red.izd-va; BOROVNEV, N.K., tekhn.red.

[Temporary instruction (SN 51-59) for planning and constructing combined roofs of residential and public buildings] Vremennye ukazaniia po proektirovaniiu i ustroistvu sovmeshchennykh krysh (pokrytii) zhilykh i obshchestvennykh zdanii (SN 51-59). Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam, 1959. 34 p.
(MIRA 13:1)

(Continued on next card)

KUZNETSOV, G.F.---(continued) Card 2.

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam stroitel'stva. 2. Nauchno-issledovatel'skiy institut stroitel'noy fiziki i ograzhdayushchikh konstruktsiy Akademii stroitel'stva i arkhitektury SSSR (for Kuznetsov, Khlusov, Sholokhov). 3. Direktor Nauchno-issledovatel'skogo instituta stroitel'noy fiziki i ograzhdayushchikh konstruktsiy Akademii stroitel'stva i arkhitektury SSSR; deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Kuznetsov). 4. Nauchno-issledov.institut zhilishcha (for Akbulatov, Krichevskaya). 5. Nauchno-issledov.institut proyektirovaniya Akademii stroitel'stva i arkhitektury SSSR (for Dorokhov). 6. Nauchno-issledov.institut po stroitel'stvu Minstroya RSFSR (for Nikiforov). 7. Gorstroyproyekt (for Bogdanov). 8. Mosproyekt (for Avrutin, Vishnevskiy). 9. Akademiya kommunal'nogo khozyaystva im. K.D. Pamfilova (for Ariyevich, Levitan). 10. Moskovskiy arkhitekturnyy institut (for Tupolev).

(Roofs, Concrete)

KRICHEVSKAYA, Ye.I., kand. tekhn. nauk

Flat roofs of apartment houses and public buildings. Opyt. stroi. 2:99-132 '59. (MIRA 13:3)
(Roofs, Concrete)

KRICHEVSKAYA, Ye., kand. tekhn. nauk

Synthetic floors in apartment houses and public buildings abroad. Na stroi. Mosk. 2 no.9:31-32 S '59. (MIRA 13:2)

1.Nauchno-issledovatel'skiy institut eksperimental'nogo proyektirovaniya Akademii stroitel'stva i arkhitektury SSSR.
(Floors) (Synthetic products)

KRICHEVSKAYA, Ye., kand. tekhn. nauk

Use of plastic materials in roof construction. Zhil. stroi. no.3: 27-29 '59. (MIRA 12:6)
(Roofs) (Plastics)

KRICHEVSKAYA, Ye., kand. tekhn. nauk

Plastics for sealing joints. Zhil. stroi. no.8:30-31 '59.
(MIRA 12:12)

(Plastics)

KRICHEVSKAYA, Ye., kand.tekhn.nauk

Prestressed reinforced concrete electric-line supports in Hungary. Biul.stroi.tekh. 16 no.2:35-39 F '59.
(MIRA 12:2)

1. Nauchno-issledovatel'skiy institut zhilishcha Akademii stroitel'stva i arkhitektury SSSR.
(Hungary--Electric lines--Poles) (Prestressed concrete)

KRICHEVSKAYA, Ye., kand.tekn.nauk

Constructing composite roofs in Bashkiria. Zhil.stroi. no.7: 21-23 Jl '60. (MIRA 13:7)
(Bashkiria--Roofs)

KRICHEVSKAYA, Ye., kand.tekhn.nauk

Details of built-up roofs. Zhil.stroi. no.5:26-29 My '61. (MIRA 14:6)

(Roofs)

KRICHEVSKAYA, Ye., kand.tekhn.nauk

Drainage from built-up roofs. Zhil. stroi. no.5:12-13 '62.
(MIRA 15:6)

(Drainage, House)

AKIYEVICH, Eleozar Moiseyevich; KRICHEVSKAYA, Ye.I., red.; SUKHAREVA, E.S., red.izd-va; SALAZKOV, N.P., tekhn.red.

[Maintenance of apartment-house roofs] Tekhnicheskaia ekspluatatsiia krysh zhilykh domov. Moskva, Izd-vo M-va kommun. khoz. RSFSR, 1963. 110 p. (MIRA 17:1)

VAYNBERG, G.D., inzh.; KRICHEVSKAYA, Ye.I., kand. tekhn. nauk; MAZALOV, A.N., inzh.; ROZENFEL'D, A.G., inzh.; FOLOMIN, A.I., doktor tekhn. nauk; TESLER, P.A., kand. tekhn. nauk; SHOLOKHOV, V.G., arkhit.; RUBANENKO, B.R., glav. red.; ROZANOV, N.P., zam. glav. red.; ONUFRIYEV, I.A., red.; YUDIN, Ye.Ya., red.; NASONOV, V.N., red.; ISIDOROV, V.V., red.; MAKARICHEV, V.V., red.; POLUBNEVA, V.I., inzh., red.

[Improving the durability of industrial built-up roofs] Voprosy povysheniia dolgovechnosti industrial'nykh sovmeshchennykh krysh. Moskva, Gosstroiizdat, 1962. 43 p. (MIRA 17:4)

1. Akademiya stroitel'stva i arkhitektury SSSR. Nauchno-issledovatel'skiy institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu. 2. TSentral'nyy nauchno-issledovatel'skiy i proyektno-eksperimental'nyy institut industrial'nykh, zhilykh i massovykh kul'turno-bytovykh zdaniy Akademii stroitel'stva i arkhitektury SSSR (for Vaynberg, Krichevskaya, Mazalov, Rozenfel'd, Folomin). 3. Nauchno-issledovatel'skiy institut stroitel'noy fiziki Akademii stroitel'stva i arkhitektury SSSR (for Sholokhov). 4. Nauchno-issledovatel'skiy institut betona i zhelezobetona Akademii stroitel'stva i arkhitektury SSSR, Perovo (for Tesler).

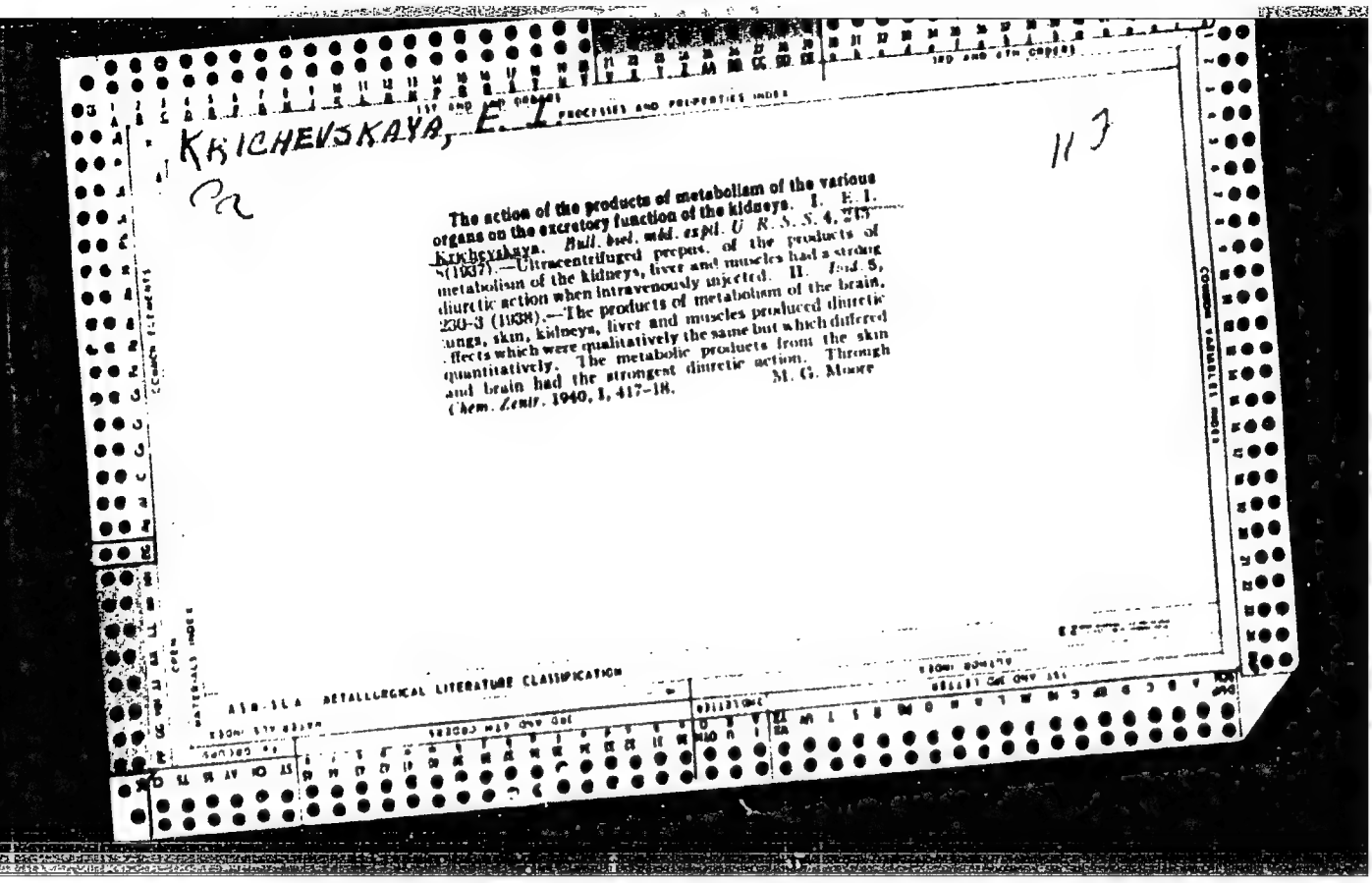
AVRUTIN, Yuliy Yefremovich, inzh.; KRICHEVSKAYA, Yelizaveta Iosifovna, kand. tekhn. nauk; LEVITAN, Yefim Petrovich, kand. tekhn. nauk; TUPOLEV, Mikhail Sergeyevich, doktor arkhitekt; FOLOMIN, Aleksandr Ivanovich, doktor tekhn. nauk;

[Precast reinforced concrete roofs for large-scale construction] Sbornye zhelezobetonnye kryshi dlia massovogo stroitel'stva. [By] IU.E.Avrutin i dr. Moskva, Stroizdat, 1965. 222 p. (MIRA 18:4)

KLEPATSKIY, L.F., inzh., red.; POLOMIN, A.I., doktor tekhn. nauk, red.; KRICHEVSKAYA, Ye.I., kand. tekhn. nauk, red.

[Instructions on designing built-up roofs for apartment and public buildings] Ukazaniia po proektirovaniiu bezcherdachnykh krysh zhilykh i obshchestvennykh zdanii (SN 91-64). Izd. ofitsial'noe. Moskva, Stroiizdat, 1965. 23 p. (MIRA 18:7)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po grazhdanskomu stroitel'stvu i arkhitekture. 2. Gosudarstvennyy komitet po grazhdanskomu stroitel'stvu i arkhitekture pri Gosstroye S.S.S.R. (for Klepatskiy). 3. Tsentral'nyy nauchno-issledovatel'skiy i proyektnyy institut tipovogo i eksperimental'nogo proyektirovaniya zhilishcha (for Polomin, Krichevskaya).

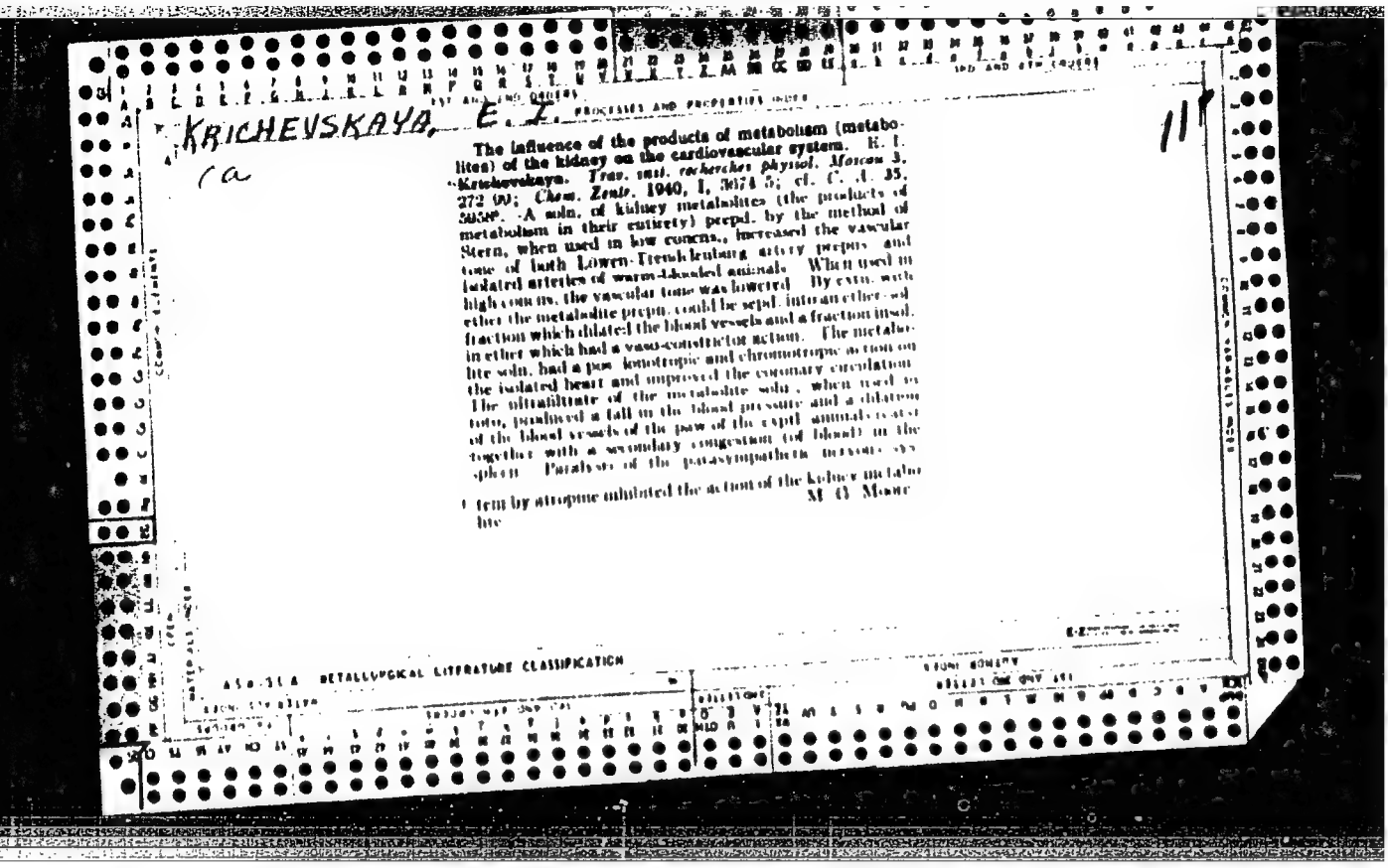


KRICHEVSKAYA, E. I.

113

The action of the products of metabolism of the various organs on the excretory function of the kidneys. I. E. I. Krichevskaya. *Bull. biol. med. exptl. U. R. S. S.* 4, 213-8 (1937).—Ultracentrifuged prepns. of the products of metabolism of the kidneys, liver and muscles had a strong diuretic action when intravenously injected. II. *Ibid.* 5, 230-3 (1938).—The products of metabolism of the brain, lungs, skin, kidneys, liver and muscles produced diuretic effects which were qualitatively the same but which differed quantitatively. The metabolic products from the skin and brain had the strongest diuretic action. Through M. G. Moore

Chem. Zentr. 1940, I, 417-18.



KRICHEVSKAYA, E. I.

ca

The influence of the products of metabolism (metabolites) of the kidney on the cardiovascular system. E. I. Krichevskaya. *Trav. inst. recherches physiol. Moscou* 3, 272 (N); *Chem. Zentr.* 1940, I, 3074-5; cf. C. A. 35, 2058⁸. A soln. of kidney metabolites (the products of metabolism in their entirety) prepd. by the method of Stern, when used in low concns., increased the vascular tone of both Lower-Tyrode-Locke-Ringer artery preps. and isolated arteries of warm-blooded animals. When used in high concns. the vascular tone was lowered. By extn. with ether the metabolite prepn. could be sepd. into an ether-sol. fraction which dilated the blood vessels and a fraction insol. in ether which had a vaso-constrictor action. The metabolite soln. had a pos. isotropic and chronotropic action on the isolated heart and improved the coronary circulation. The ultrafiltrate of the metabolite soln., when used as a whole, produced a fall in the blood pressure and a dilatation of the blood vessels of the paw of the expti. animals together with a secondary congestion (of blood) in the spleen. Paralysis of the parasympathetic nervous system by atropine inhibited the action of the kidney metabolite.

M. G. Moore

11

ASTIA METALLURGICAL LITERATURE CLASSIFICATION

KRICHEVSKAYA, E. I.

11F

The influence of the neurovegetative system on the
1 character of the brain metabolites Ya. A. Rosin and E.
Krichevskaya. *Bull. Eksp. Biol. Med.* [illegible] 9, 30
[illegible] Excitation of the [illegible] of
dogs by means of an induction coil caused a sharp decrease
in K ion and an increase in Ca ion in the cerebrospinal
fluid. In most cases the sinusal and arterial blood also
showed a decrease in K ion, but in about [illegible] of the cases it
increased. In all cases blood Ca decreased. After de-
velopment of hypertension by denervation of the reflexo-
genic vascular zones, K decreased in venous and arterial
blood and in the cerebrospinal fluid, while in all cases Ca
increased. Large increases in P in the cerebrospinal fluid
were also observed. The excitation of the centers of the
sympathetic nervous system causes a general excitation of
the peripheral sympathetic system and the production of
sympathicomimetic metabolites. The latter enter the
blood stream and traverse the disturbed hemato-encephalic
5 barrier, as is indicated by the presence of a sympathicomi-
metic substance in the cerebrospinal fluid and a consider-
able increase in the Ca/P ratio. S. A. Karjala

METALLURGICAL LITERATURE CLASSIFICATION

KRICHEVSKAYA, Ye.I.; MAYTINA, R.A.; SOMINA, S.I.

Role of biologically active substances of the skin in the pathogenesis of itching. Vop.med.khim. 3:114-125 '51. (MIRA 11:4)

1. Biokhimicheskaya laboratoriya TSentral'nogo kozhno-venerologicheskogo instituta, Moskva.
(PRURITIS) (HISTAMINE) (ACETYLCHOLINE)

KRASNOV, M.L., professor.; KRICHEVSKAYA, Ya.I., kandidat meditsinskikh nauk.; SHAKHNOVICH, S.I., kandidat meditsinskikh nauk.,; SHUL'PINA, N.B. kandidat meditsinskikh nauk.,; GEL'FMAN, A.Ya.vrach.

Dicoumarin in a thromboembolic syndrome of the retinal blood vessels. Vest. oft. 68 no.1:3-8 Ja-F '56 (MLRA 9:5)

1. Iz kafedry glaznykh bolezney TSentral'nogo instituta usovershenstvovaniya vrachey (zav.-prof. M.L. Krasnov) i Moskovskoy glaznoy klinicheskoy bol'nitsy (glav. vrach-I.A. Lyubchenko)
(RETINA--BLOOD SUPPLY)

21(3)

AUTHORS: Krichevskaya, Ye. I., Kapitonova, G. V. SOV/20-123-1-17/56

TITLE: The Influence of X-Rays on the Histaminopexic Capacity of Tissues (Vliyaniye rentgenovskikh luchey na gistaminopeksicheskuyu sposobnost' tkaney)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 1, pp 68-71 (USSR)

ABSTRACT: The authors found it of interest to investigate whether the variation of the free histamine level in the tissues under the influence of X-rays observed by them (Ref 12) might not be connected with a disturbance of their histaminopexic capacity. First, experimental methods are investigated, viz. the determination of the histaminopexic capacity of the tissues and the determination of the free histamine in the tissues. The existence of the histaminopexic capacity of the tissues was investigated under physiological conditions, the test subjects being rats, guinea pigs, and rabbits. The results obtained are shown in a table. All tissues investigated by the authors (the skin of the abdomen, kidneys, liver, stomach, lungs and brain) have a considerable histaminic capacity. With the exception of the skin the data obtained with respect to the above-mentioned

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types of animals do not differ from one another. Next, the influence exercised by X-rays upon the histaminopexic capacity of tissues was investigated in the case of 72 white rats. The animals were irradiated with a single lethal dose of 800-1000 r. The skin, kidneys, liver, and the brain were investigated, and results are shown in a table. A single lethal irradiation reduces the histaminopexic capacity of the skin and of the tissues as well as of the kidneys and the brain considerably, whereas the histaminopexic capacity of the liver is not disturbed under the given conditions. The irradiation takes effect very rapidly, and the greatest change occurs already after an irradiation of 5 minutes. The histaminic capacity of the tissues is even more reduced by the death of the animals. Histaminopexy (gistaminopeksiya) exercises a protective influence. Between the change of the level of the free histamine in the tissues and their histaminopexic capacity there is a distinctly causal correlation. Certain protective mechanisms are probably not disturbed by irradiation. One of them is probably histaminase. The present paper leads to the following conclusions:

The Influence of X-Rays on the Histaminopexic Capacity of Tissues

SOV/20-123-1-17/56

1) Histaminopexic capacity is present not only in the blood but also in other animal tissues.
2) Damage caused by irradiation rapidly and noticeably suppresses the histaminopexic capacity of the tissues.
3) The histaminopexic capacity of the tissues is, without doubt, one of the protective mechanisms which regulate the level of the free histamine in the organism. There are 3 tables and 16 references, 2 of which are Soviet.

ASSOCIATION: Institut biologicheskoy fiziki Akademii nauk SSSR (Institute for Biological Physics of the Academy of Sciences, USSR)

PRESENTED: July 1, 1958, by L. S. Shtern, Academician

SUBMITTED: June 27, 1958

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17.(1),21 (3)

AUTHORS: Gromakovskaya, M. M., Krichevskaya, Ye. I., Rapoport, S. Ya.

SOV/20-126-4-52/62

TITLE: The Effect of Antihistamine Preparations on the Development of Some Early Ray Disturbances (Vliyaniye antigistaminnykh preparatov na razvitiye nekotorykh rannikh luchevykh narusheniy)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 126, Nr 4, pp 876-879 (USSR)

ABSTRACT: The importance of histamine for the development of a radiation syndrome (Refs 1-8) has not yet been fully clarified: different investigators have different opinions about the efficiency of histamine preparations in radiation sickness. In previous papers (Refs 14, 15) it was proved that already 5 minutes after irradiation a rise in level of the free histamine occurs in various tissues. Their histaminepexy [gistaminopeksicheskaya] power (HPP) decreases. These changes in the chemical composition of the immediate medium of organs and tissues may be important for the origin of various disturbances in the organism irradiated. To investigate this problem, antihistamine preparations (Dimedrol and pernovine) were administered to white rats before irradiation. All investigations were carried out 45

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minutes after irradiation. The results were summarized as follows: Effect of antihistamine preparations on: 1) the level of free histamine, and on the HPP of the tissues of the animals irradiated (Refs 14, 15) (Table 1); 2) the permeability of the histohematic barriers (HHB) (Table 3); 3) the reflex excitability of the center of the n. vagus (Table 4); 4) the reaction of the marrow of the bones at total irradiation (Table 5). The results found by the authors show that the administration of the said antihistamine preparations not only prevents the rise in level of free histamine in tissues but also the permeability disturbance of the HHB and the change in the functional state of the vagus center. Finally the early damages to the marrow of the bones are weakened. Thus, it is possible - by lowering the level of free histamine originating in the tissues of the animals irradiated - to interrupt the chain of reactions which effect the appearance and development of various ray

damages. On the other hand, the results obtained cannot be regarded - due to the complicated action of various antihistamine preparations - as an undisputed proof of the fact that histamine plays an important part in early radiation reactions. According to publication references (Ref 18), such histamine preparations as prometazine and chlorpromazine also inhibit the release of 5-hydroxy-tryptamine. Further investigations are necessary to decide this problem. There are 5 tables and 18 references, 4 of which are Soviet.

ASSOCIATION: Institut biologicheskoy fiziki Akademii nauk SSSR (Institute of Biological Physics of the Academy of Sciences, USSR)

PRESENTED: March 5, 1959, by L. S. Shtern, Academician

SUBMITTED: March 5, 1959

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B016/B067

AUTHOR: Krichevskaya, Ye. I.

TITLE: The Part Played by the Nervous System in the Change of the Level of Free Histamine in the Tissues Under the Action of Ionizing Radiation

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 135, No. 1, pp.193-196

TEXT: In her earlier papers (Refs. 14-16), the author found that the content of free histamine in the animal tissue rises shortly after a single irradiation with a lethal dose of X-rays. A thorough study of the biochemical processes showed that this change is due to a change in activity of the ferment system: histidine decarboxylase - histaminase, and to a reduction of the histamine-fixing property of the tissues. In the present paper, the author attempts to clarify whether the increase in the content of free, biologically active histamine in various organs is the result of a direct action of radiation on the tissue, or whether it is a reflex, similar to other radiation damages. For this purpose, she studied the effect

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The Part Played by the Nervous System in the Change of the Level of Free Histamine in the Tissues Under the Action of Ionizing Radiation

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of ionizing radiation on the content of free histamine in the tissue with elimination of the receptor apparatus. In most of the cases, it was eliminated with Xylocaine (Ref. 21) which has no antihistamine properties. However, for comparison, she also used Novocaine in a number of experiments. Both preparations were introduced intraperitoneally 15-20 min prior to irradiation. White rats served as test animals. The single radiation was performed by an apparatus Рун-1(RUP-1)[illegible] with a dose of 1000 r, the dose rate was 31.4 r/min. The free histamine was determined 45 min after the irradiation. Table 1 shows the results. They indicate that Xylocaine and Novocaine cause no essential reduction of the histamine level in the tissue of normal animals. In anesthetized animals, however, no radiation effect was observed at all. With rats which were injected Novocaine or Xylocaine prior to irradiation, the histamine content of the skin was even somewhat reduced. A slight reduction was also observed in the brain tissue. In the liver, no histamine rise was observed as is usually the case after irradiation. On the basis of these results, the author concludes that the

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The Part Played by the Nervous System in the Change of the Level of Free Histamine in the Tissues Under the Action of Ionizing Radiation

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B016/B067

radiation effect has a reflex character. This effect disappears if reception is eliminated by means of an anesthetizing preparation. In contrast to the opinion of Ye. P. Stepanyan and D. A. Almoyeva (Refs. 18,19), the author doubts the antihistamine effect of Novocaine (see Table 2). Neither Novocaine nor its decomposition product (paraaminobenzoic acid), but the blood serum itself which has histamine-fixing properties, plays the decisive part in the disappearance of histamine (Ref. 23). Therefore, the absence of the radiation effect (increase of the free histamine content) with the introduction of Xylocaine or Novocaine prior to the irradiation does not signify that these preparations have antihistamine properties. On the contrary, the interruption of the normal as well as of the pathological impulses (as a result of the elimination of the receptor apparatus) which originate from the abdominal cavity during irradiation inhibits the processes causing an increase of the free histamine content in the tissue. The thesis that the radiation effect has a reflex character is confirmed by complementary experiments made by the author. They were

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The Part Played by the Nervous System in the Change of the Level of Free Histamine in the Tissues Under the Action of Ionizing Radiation

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made with rats whose kidneys had been previously denervated without anesthesia. As was expected, the histamine content in the control kidney increased after irradiation, whereas that in the denervated kidney remained almost normal. The elimination of the afferent way by means of an anesthetizing preparation compensates the radiation effect in the same manner as the elimination of the efferent link by denervation of the kidney by inhibiting the rise of the histamine content in the tissue. There are 3 tables and 25 references: 20 Soviet, 1 US, and 1 French.

ASSOCIATION: Institut biologicheskoy fiziki Akademii nauk SSSR (Institute of Biological Physics of the Academy of Sciences, USSR)

PRESENTED: April 26, 1960, by L. S. Shtern, Academician

SUBMITTED: April 5, 1960

Card 4/4

ACCESSION NR: AT3012856 S/2970/61/000/0048/0056

AUTHOR: Krichevskaya, Ye. I.; Kapitonova, G. V.

TITLE: Effect of ionizing radiation on the histamine level in tissues and its significance in early radiation damage to the histo-hematic barriers

SOURCE: Gisto-gematicheskiye bar'yery*: trudy* soveschaniya, 25-28 maya 1960 g., Moscow, 1961, 48-56

TOPIC TAGS: radiation sickness, ionizing radiation, histo-hematic barriers, histamine level, enzyme activity, histamine binding, histamine liberation, histamine depletion, renal barriers, hepatic barriers, barrier permeability

ABSTRACT: As a continuation of earlier research by the authors (Dokl. AN SSSR, v. 123, no 1), the part played by histamine in the radiation derangement of permeability of the histo-hematic barriers, which is still highly debatable in spite of numerous researches, was investigated. An increase in the free histamine content of var-

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ACCESSION NR: AT3012856

ious tissues, except the brain, was noted after a single irradiation with a lethal x-ray dose. The changes result from altered activity of the exzymes that produce and destroy the histamine, as well as from a disturbance in the processes of its binding and liberation. Of great significance is the change in the histominopexic function of the tissues as controlled by the pituitary adrenal system. The radiation changes in the histamine level of the tissues are of a reflex nature. The initial link of this reflex is localized in the abdominal organs. No permeability disturbances were noted in the hemato-encephalic or other histo-hematic (renal and hepatic) barriers to P-32 upon elimination of the radiation changes in the histamine level by antihistamine drugs. The effect of massive liberation and depletion of histamine on permeability disturbances of the hemato-encephalic barrier to acid fuchsin was also noted. Although the material obtained does not lead to final conclusions regarding the role of histamine on the radiation syndrome, it undoubtedly participates in radiation damage to the permeability of histo-hematic barrier. Orig. art. has: 9 tables.

Card 2/3

ACCESSION NR: AT3012856

ASSOCIATION: Institut biologicheskoy fiziki AN SSSR, Moscow
(Institute of Biological Physics, AN SSSR)

SUBMITTED: 00	DATE ACQ: 12Jul63	ENCL: 00
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Card 3/3

ACCESSION NR: AT3011782 S/2949/63/000/000/0140/0158

AUTHOR: Krichevskaya, Ye. I.; Kapitonova, G. V.

TITLE: Ionizing radiation effect on mechanisms regulating free histamine level in the organism

SOURCE: Gisto-gematicheskiye bar'yery* i ioniziruyushchaya radiatsiya. Sbornik rabot laboratorii fiziologii. Moscow, AN SSSR, 1963, 140-158

TOPIC TAGS: ionizing radiation, lethal X-radiation dose, free histamine, free histamine level mechanism, chromatographic method, radiation damage, hypophysical-adrenal system, tissue bond forming capacity, brain tissue, histamine level shift, reflex nature, direct nutritive medium

ABSTRACT: Experimental white rats were X-irradiated with single lethal doses of 800-1000 r (RUP-1 unit, 50 r/min). At different periods after irradiation free histamine content was determined by a modified chromatographic method in the following tissues: brain, skin, stomach, liver, and kidneys. Results show that free histamine increases shortly after irradiation in all tissues studied except the

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ACCESSION NR: AT3011782

brain and decreases before death. Absence of free histamine level change in the brain indicates effective protective mechanisms for providing the central nervous system with a relatively constant direct nutritive medium despite radiation damage in the organism. The radiation reaction mechanism for increasing histamine varies in different organs. In some organs it depends mostly on freeing the histamine and in others on activating its formation. These processes are greatly affected by the depressed capacity of tissues to form bonds with histamine resulting from functional radiation damage of the hypophysical-adrenal system. The reflex nature of histamine level shifts indicates unity of neurohumoral mechanisms in radiation damage. Orig. art. has: 9 tables.

ASSOCIATION: Laboratoriya fiziologii. Moscow. AN SSSR (Physiology Laboratory. AN SSSR)

SUBMITTED: 00 DATE ACQ: 07Oct63 ENCL: 00

SUB CODE: AM NO REF SOV: 028 OTHER: 064

Card 2/2

RAPOPORT, S. Ya.; KRICHEVSKAYA, Ye. I.; ZUBKOVA, S.R.

Interaction of biogenic amines in the mechanism of the protection from the effect of ionizing radiation by histamine. Dokl. AN SSSR 155 no. 5:1198-1200 Ap '64. (MIRA 17:5)

1. Institut biologicheskoy fiziki AN SSSR. Predstavleno akademikom L.S.Shtern.

ACCESSION NR: AP4034549 S/0020/64/155/005/1198/1200

AUTHOR: Rapoport, S. Ya.; Krichevskaya, Ye. I.; Zubkova, S. R.

TITLE: Interaction of biogenic amines in the mechanism by which histamine protects against the effect of ionizing radiation

SOURCE: AN SSSR. Doklady*, v. 155, no. 5, 1964, 1198-1200

TOPIC TAGS: catecholamine, serotonin, histamine, radiation protection, sympathetic nervous system

ABSTRACT: The interaction of biogenic amines in the mechanism by which histamine protects against the effect of ionizing radiation is discussed, as well as the assumption that this protection is accomplished through the liberation of certain amines in the tissues. The present work aimed at elucidating the role of catecholamine and serotonin in the above mechanism by conducting 3 series of experiments on white rats: a—functional exclusion of the sympathetic nervous system by ergo-

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ACCESSION NR: AP4034549

tamine, b — depletion of catecholamine and serotonin stores by prior reserpine administration, c — introduction of the serotonin antagonist, lysergic acid diethylamide. Experimental conditions are described (600 r irradiation, amounts, manner, and route of drug administration). The histamine (35—50 mg per rat) was administered 5 minutes before irradiation. Results are tabulated and show that histamine alone protected 34.8% of the animals. This effect was reduced upon prior blocking of the sympathetic nervous system and upon catecholamine and serotonin depletion. The important role of catecholamine in histamine protection was clearly seen in tests excluding the sympathetic nervous system (reduction of survival rate by 20% only). Introduction of the serotonin antagonist did not affect the protective histamine effect; thus, serotonin may be assumed not to play a significant role in this effect. These findings were confirmed in tests to determine catecholamine content in the adrenals, and serotonin in the upper intestinal tract and brain after histamine introduction. Five minutes after histamine administration the catecholamine in the adrenals was considerably reduced, while no change was detected in serotonin content. Orig. art. has: 3 tables.

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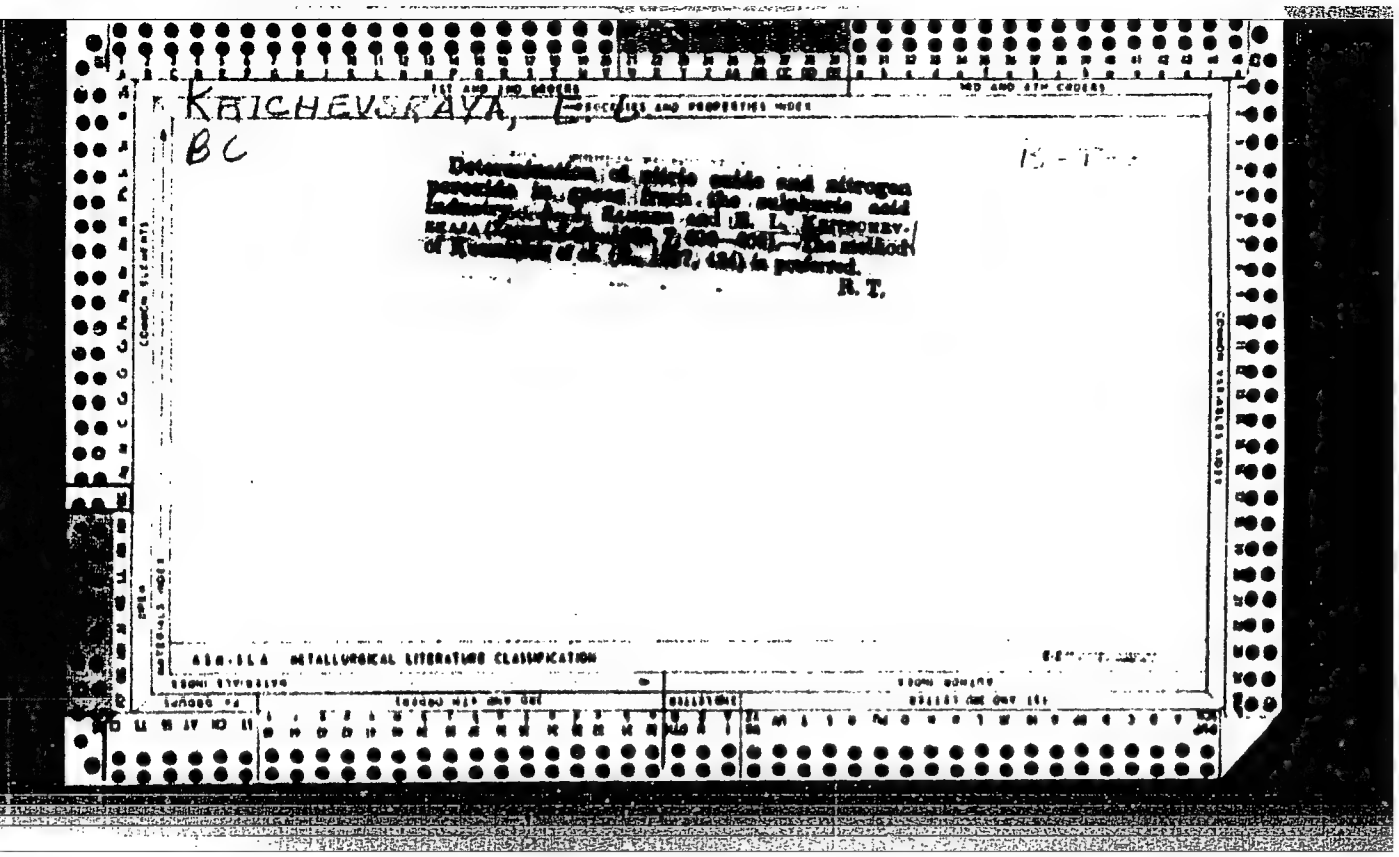
ACCESSION NR: AP4034549

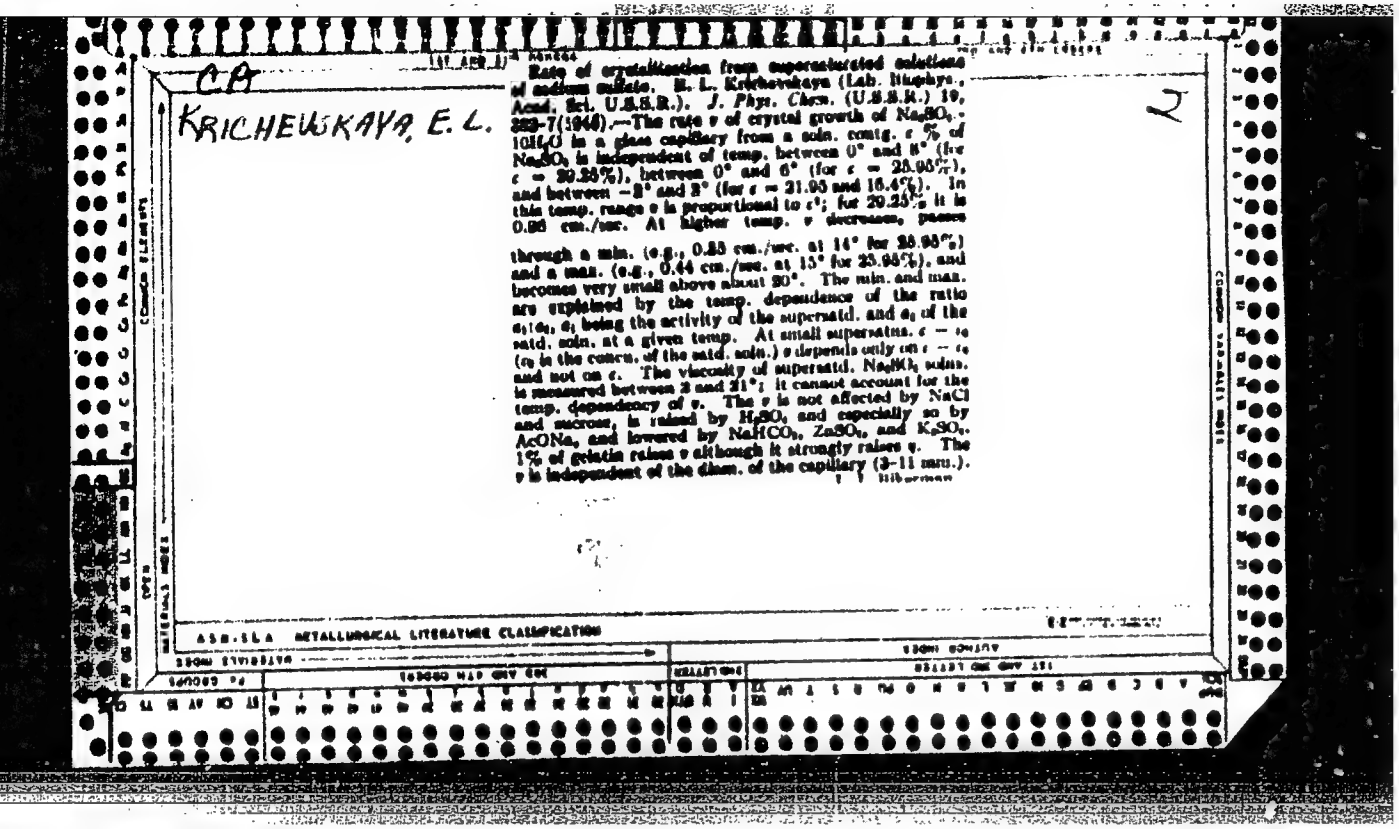
ASSOCIATION: Institut biologicheskoy fiziki Akademii nauk SSSR (Institute of Biophysics, Academy of Sciences SSSR)

SUBMITTED: 03Jul63 ATD PRESS: 3060 ENCL: 00

SUB CODE: LS, OC NO REF SOV: 001 OTHER: 007

Card 3/3


KAICHEVSKAYA, E. S.
BC
Determination of nitric oxide and nitrogen peroxide in gases from the sulphonic acid
R. T.
A58-51A METALLURGICAL LITERATURE CLASSIFICATION



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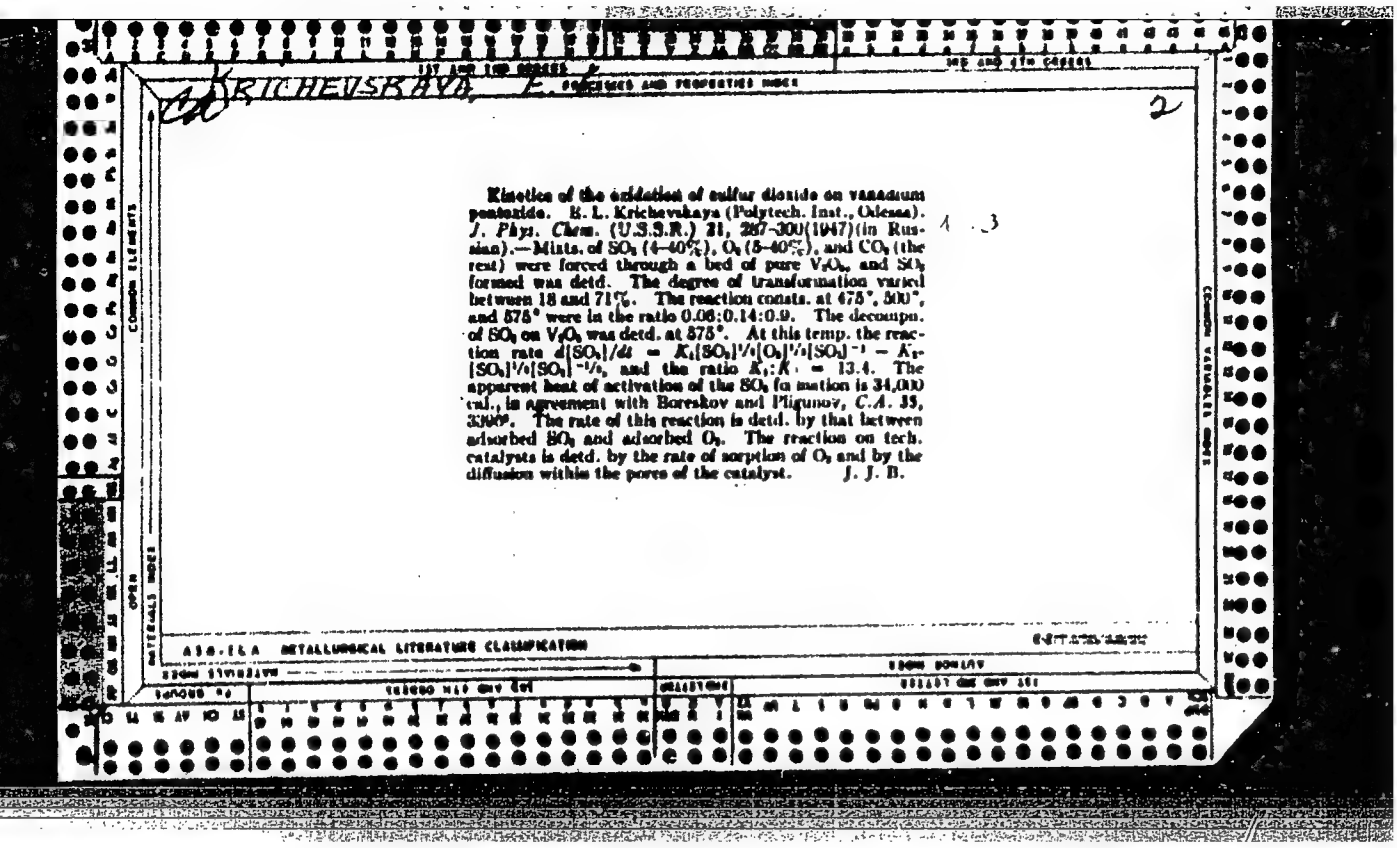
KRICHEWSKAYA, E. L.

2

Rate of crystallization from supersaturated solutions of sodium sulfate. E. L. Krichevskaya (Lab. Biophys., Acad. Sci. U.S.S.R.). *J. Phys. Chem.* (U.S.S.R.) 19, 383-7(1945).—The rate v of crystal growth of $Na_2SO_4 \cdot 10H_2O$ in a glass capillary from a soln. contg. c % of Na_2SO_4 is independent of temp. between 0° and 8° (for c = 29.95%), between 0° and 6° (for c = 25.95%), and between −2° and 2° (for c = 21.95 and 16.4%). In this temp. range v is proportional to c^3; for 29.25% it is 0.95 cm./sec. At higher temp. v decreases, passes through a min. (e.g., 0.55 cm./sec. at 14° for 29.95%) and a max. (e.g., 0.44 cm./sec. at 15° for 25.95%), and becomes very small above about 30°. The min. and max. are explained by the temp. dependence of the ratio a_1/a_0, a_1 being the activity of the supersatd. and a_0 of the satd. soln. at a given temp. At small supersatns. $c - c_0$ (c_0 is the concn. of the satd. soln.) v depends only on $c - c_0$ and not on c. The viscosity of supersatd. Na_2SO_4 solns. is measured between 2 and 21°; it cannot account for the temp. dependency of v. The v is not affected by NaCl and sucrose, is raised by H_2SO_4 and especially so by AcONa, and lowered by $NaHCO_3$, $ZnSO_4$, and K_2SO_4. 1% of gelatin raises v although it strongly raises η. The v is independent of the diam. of the capillary (3–11 mm.).

I. Silberman



KRICHEVSKAYA, E.

2

Kinetics of the oxidation of sulfur dioxide on vanadium pentoxide. E. L. Krichevskaya (Polytech. Inst., Odessa). *J. Phys. Chem.* (U.S.S.R.) 21, 287-300(1947)(in Russian).—Mixts. of SO_2 (4–40%), O_2 (5–40%), and CO_2 (the rest) were forced through a bed of pure V_2O_5, and SO_3 formed was detd. The degree of transformation varied between 18 and 71%. The reaction consts. at 475°, 500°, and 575° were in the ratio 0.06:0.14:0.9. The decompn. of SO_3 on V_2O_5 was detd. at 575°. At this temp. the reaction rate $d[SO_3]/dt = K_1[SO_3]^{1/2}[O_2]^{1/2}[SO_2]^{-1} - K_2[SO_3]^{1/2}[SO_2]^{-1/2}$, and the ratio $K_1:K_2 = 13.4$. The apparent heat of activation of the SO_3 formation is 34,000 cal., in agreement with Boreskov and Pligunov, *C.A.* 35, 3390°. The rate of this reaction is detd. by that between adsorbed SO_3 and adsorbed O_2. The reaction on tech. catalysts is detd. by the rate of sorption of O_2 and by the diffusion within the pores of the catalyst. J. J. B.

Krichevskaya, E. L.

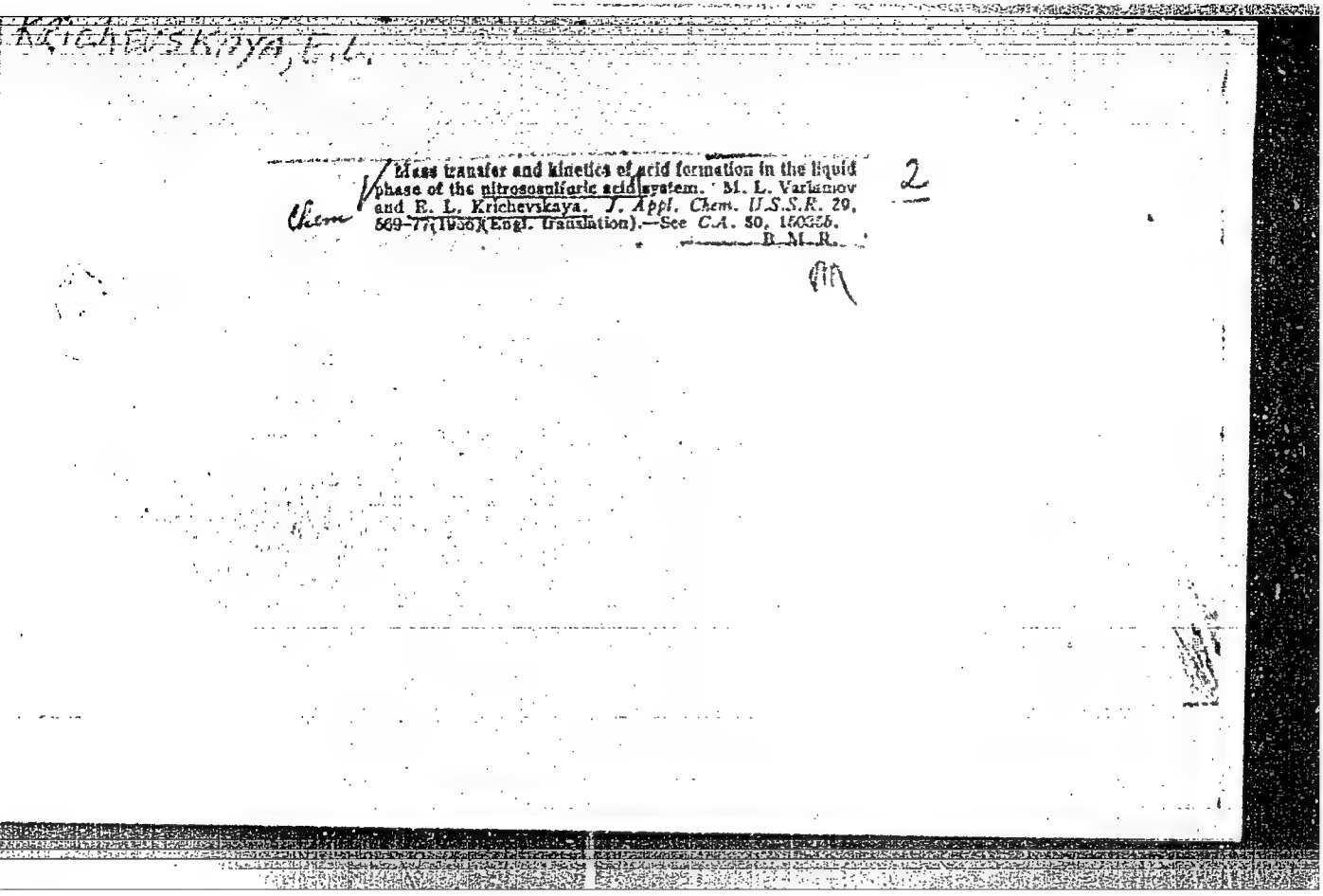
The optimum temperature range for parallel reactions. E. L. Krichevskaya. *Zhur. Fiz. Khim.* 26, 3-9(1952).—The selection of the proper temp. range at which parallel reactions can be carried on is detd. by the ratio of the activation energies of the main and of the side reactions. If $E_1 \geq E_2$ then the reaction should be carried on at as high a temp. as possible. However, if $E_1 < E_2$, then an optimum temp. range exists in which the reaction time will be at a min. An equation was derived for the optimum temp. curve for 2 irreversible parallel reactions of the first order: $1/T = (1/T_0) + (R/ME_1)\ln[1 - (x/x_0)]$, where $m = E_2/E_1$, and x is the degree of conversion. Equations were also derived for calcg. the reaction time at the optimum temp. range and the yield of the side products. J. Kovlar Leach

KRICHEVSKAYA, E.L.

5

Mass-transfer and kinetics of acid formation in the liquid phase of the nitrososulfuric acid system. M. L. Varlamov and E. L. Krichevskaya (Polytech. Inst., Odessa). Zhur. Priklad. Khim. 23, 820-9(1950).—Available plant data and exptl. data (Ilikon, et al., C.A. 40, 4213i, Kuz'minykh and Surikov, 30, 6211) were recalcd. by Belopol'skii's equation (cf. C.A. 41, 6027h), for absorption processes assocd. with a reversible 1st-order reaction. The velocity const. k_1 = $N^2/H^2 \rho^2 DB$ (B concn. of active component in the absorbent, D diffusion coeff. for SO_2) for nitrose concns. (% HNO_3) 1.2-3.0% is independent of the liquor rate above 30 ml./min. With 0.1 and 7% nitrose k_1 rises rapidly with the liquor rate and the rise is more rapid with the temp. in the presence of O than without O. k_1 in the 1st reaction tower is of the order of 1600-3200 cu. m./kg. mol. min. and 6200-400 in the 2nd tower, and the effect of the gas film resistance in the 1st and 2nd towers are 2-4 and 20-8%, resp. The high value of the mass-transfer coeff. indicates that the reaction occurred primarily at the interface. With the concn. of H_2SO_4 initially const. k_1 increases with the nitrose concn.

I. Bencowitz



KRICHEVSKAYA, E. L.

Chem

Mass transfer and kinetics of acid formation in the liquid phase of the nitrososulfuric acid system. M. L. Varfamov and E. L. Krichevskaya. *J. Appl. Chem. U.S.S.R.* 29, 669–77 (1956) (Engl. Translation).—See *C.A.* 50, 15033b. B. M. R.

2

VARLAMOV, M.L.; KRICHEVSKAYA, Ye.L.

Effect of temperature, transference rate for nitrogen oxides, and of the increased strength of sulfuric acid on the rate of acid formation. Zhur.prikl.khim. 29 no.5:675-682 My '56. (MLRA 9:8)

1. Odesskiy politekhnicheskiy institut.
(Nitrogen oxides) (Sulfuric acid)

KRICHEVSKAYA, E. L.

Theory of the process of acid forming in nitrous-sulfuric acid systems. II. Effect of temperature, rate of nitrogen oxide transfer, and fixation (in the phase interface) of sulfuric acid on the rate of acid forming. M. I. Yurlanov and E. L. Krichevskaya. *J. Appl. Chem. U.S.S.R.* 20, 735–42 (1950) (English translation).—See *C.A.* 50, 16050f.

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24(1) PHASE I BOOK EXPLOITATION SOV/1627

Vsesoyuznaya akusticheskaya konferentsiya. 4th, Moscow, 1958

Referaty dokladov (Abstracts of Reports at the Fourth All-Union Acoustical Conference) Pt. 2. Moscow, Akad. nauk SSSR, 1958. 44 p. Number of copies printed not given.

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Resp. Ed.: L.M. Brekhovskikh, Corresponding Member, USSR Academy of Sciences.

PURPOSE: These abstracts are intended for scientists and engineers interested in acoustics.

COVERAGE: This is a mimeographed collection of brief abstracts of papers presented at the Fourth All-Union Acoustical Conference. The subjects covered are propagation of sound in nonhomogeneous media, nonlinear acoustics, ultrasonics, acoustic measurements, electroacoustics and architectural and structural acoustics.

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VARLAMOV, M.L.; KRICHEVSKAYA, Ye.L.

Expressing the concentration of sulfuric acid in nitrose. Izv. vys.ucheb.zav.; khim.i khim.tekh. 2 no.6:904-908 '59.
(MIRA 13:4)

1. Odesskiy politekhnicheskiy institut. Kafedra tekhnologii i avtomatizatsii khimicheskikh proizvodstv.
(Nitrosylsulfuric acid)
(Sulfuric acid)

S/194/62/000/004/065/105
D295/D308

AUTHORS: Varlamov, M. L., Krichevskaya, Ye. L., Manakin, G. A., Znan, A. A., Kozakova, L. M. and Zbroshek, L. S.

TITLE: Investigation of the acoustical coagulation of aerosols formed in chemical factories

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 4, 1962, abstract 4-5-38g (V sb. Primeneniye ul'traakust. k issled. veshchestva. no. 12, M., 1960, 199-204)

TEXT: The coagulation of mists of sulphuric acid, of solutions of ammonium nitrate and nitride, of silicon-fluorhydric acid and coal-dust was investigated. Mists were precipitated in horizontal tubes of 45 mm diameter and 500 - 950 mm length, and dusts in vertical tubes. ГС-2 (GS-2) generators, with a separating membrane of thin rubber, were used for sound-irradiating the gas. Coagulation monitoring was carried out by chemical and nephelometric control methods, as well as by determining the numerical concentration of

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Investigation of the ...

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particles by means of the УМФ-3 (UMF-3) ultramicroscope. The concentration of H_2SO_4 mist amounted to 0.3 - 10.6 g/cm³; at an [irradiation] level of 153 - 155 dB for the duration of 4 - 5 sec the degree of coagulation reaches 97 - 99%. The best results were obtained at frequencies of 16 and 22 kc/s. Data were presented on coagulation of mists containing fluorine compounds. [Abstracter's note: Complete translation.]

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(24, 16 00)

S/058/62/000/003/055/092
A061/A101

AUTHORS: Varlamov, M. L., Manakin, G. A., Krichevskaya, Ye. L., Gospodinov, A. N.

TITLE: A study of the acoustic field of a gas-flow sound generator of the Hartmann type

PERIODICAL: Referativnyy zhurnal, Fizika, no. 3, 1962, 38, abstract 3G304 (Sb. "Primeneniye ul'traakust. k issled. veshchestva", no. 12, Moscow, 1960, 205-213)

TEXT: A gas-flow sound generator ГС -2 (GS-2) (of the Hartmann type) was worked out to study the acoustic coagulation process in aerosols. The acoustic field obtained with the GS-2 generator was examined and so was the effect of the tuning parameters (distance between nozzle and resonator, depth of resonator) on the intensity and frequency of sound in the free field with different diameters of both nozzle and resonator. The acoustic field was found to be remarkably inhomogeneous. Diagrams of sound directivity in the horizontal and vertical planes were plotted. Using a reflector, it was possible to obtain a directed acoustic energy beam of an intensity up to 5 w/cm^2 or 167 db. The sound

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intensity considerably depends on the frequency which was chiefly determined by the resonator depth. A series of optimum frequencies was found, where intensity passed through maxima. The distance between nozzle and resonator, their diameters, the reflector position, and the pressure of compressed air blown through the generator are of no significant influence upon the optimum frequencies. Frequency and intensity of sound depend not only on the design parameters of the generator and on its size, but also on the direction in which these parameters have changed. This is related to the phenomenon called the hysteresis of sound. Hysteresis may be observed in a definite region, where all design parameters are changed. There are 16 references.

[Abstracter's note: Complete translation]

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SOV/80-33-1-3/49

AUTHORS: Varlamov, M. L., Krichevskaya, Ye. L., Manakin, G. A., Kozakova, L. M., Gospodinov, A. N.

TITLE: Acoustic Coagulation of Sulfuric Acid Fog

PERIODICAL: Zhurnal prikladnoy khimii, 1960, Vol 33, Nr 1, pp 14-20 (USSR)

ABSTRACT: Acoustic coagulation of sulfuric acid vapors (which is an effective method for purification of air from finely dispersed (10^{-1}-10^{-2}) aerosols) was studied using the installation shown in Fig. 1 (which also includes devices for generation of the fog).

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Fig. 1. Diagram of installation for generation of sulfuric acid fog and for study of acoustic coagulation of the fog. (1) Gas cylinder; (2) gas scrubbers; (3) h rheometers; (4) mixer (SO_2 + air); (5) contact oven; (6) thermocouple; (7) electronic thermoregulator; (8) recording galvanometer; (9) humidifier; (10) compressor; (11) gas jet sound generator; (12) coagulation pipe; (13) photonephelometer; (14) ultrathermostat; (15) absorption tubes; (16) aspirator.

Acoustic Coagulation of Sulfuric Acid Fog

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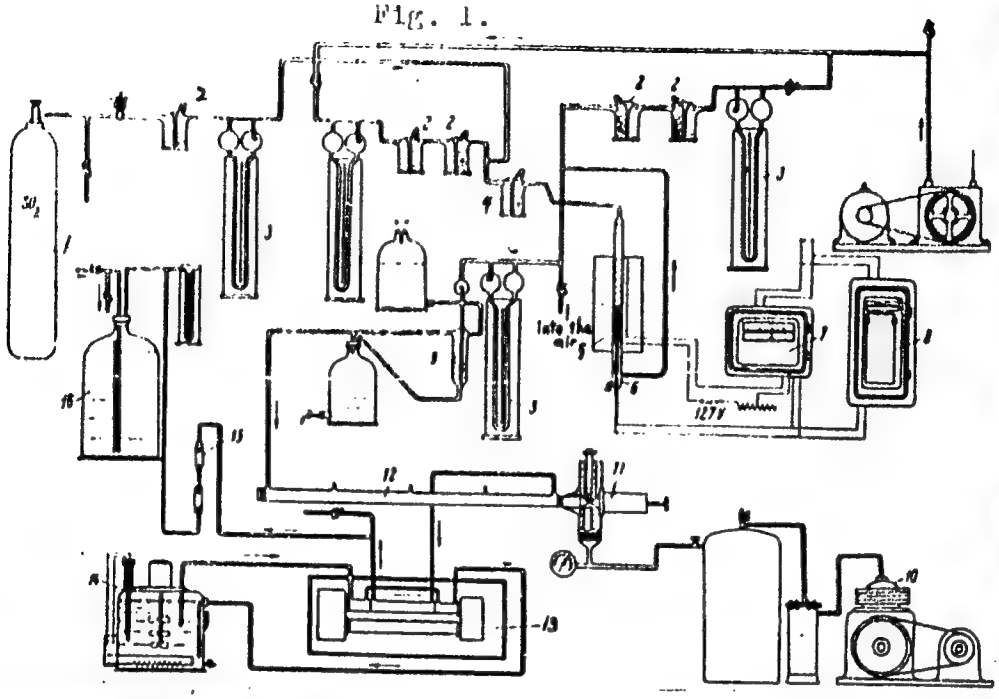
Fig. 1.



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Acoustic Coagulation of Sulfuric Acid Fog

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SOV/80-33-1-3/49

Vapors of sulfuric acid were obtained by mixing water vapor with sulfuric anhydride (obtained by oxidation of SO_2 with air in the contact oven (5)) in the humidifier (9). The gas jet generator GS-2 (11)--the modified Hartmann (Gartman) whistle (constructed in Odessa Polytechnical Institute with participation of N. A. Ivanov)--was used for inducing coagulation in the glass tube (12) 45 mm diam, length 500 mm). Sound frequency was measured with an EO-7 oscillograph and ICh-6 frequency meter. The coagulated fog was analyzed by photonephelometer (13). To prevent vapor condensation, the face glasses of the sample tubes of the nephelometer were kept at 55° by circulating water from the thermostat (14). The nephelometer values were compared with the data of chemical analysis (of H_2SO_4). The analysis of acoustic coagulation of H_2SO_4 fog has shown that

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there are optimum frequencies for coagulation at each sound intensity; increasing acoustic power displaces this optimum toward the lower frequencies (see Fig 2).

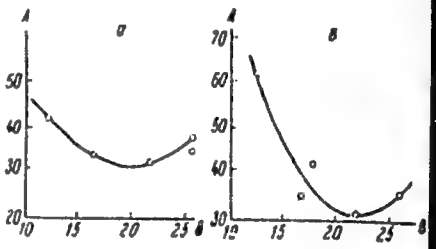

Fig. 2. Final concentration of sulfuric acid fog as function of sound frequency at varying acoustic power of the generator. (A) Photonephelometer readings (in scale divisions); (B) frequency (in keycles). Generator power (in watts): (a) 5; (b) 2.5.

Fig. 3 shows variation in degree of fog coagulation with change in acoustic power at constant frequency.

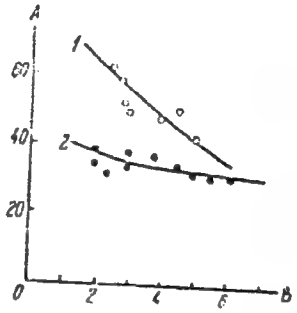

Fig. 3. Final concentration of H_2SO_4 fog as function of acoustic power. (A) Readings of photonephelometer (in scale divisions); (B) acoustic power (in watts). Frequency (in Kcycles) (1) 12.1; (2) 21.6.

It can be seen that coagulation increases with increasing sound intensity, but the higher frequencies make this effect less pronounced. Effect of initial concentration of H_2SO_4 fog upon coagulation is shown in Fig. 4 (time of sounding 4.7 sec; gas flow 5.8 l/min).

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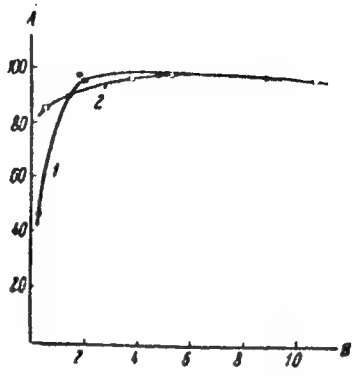
Fig. 4. Degree of coagulation of H_2SO_4 fog as function of initial vapor concentration (in g H_2SO_4/m^3 at STP). Frequency (in kcycles): (1) 14.6; (2) 25.5.



Better than 97% coagulation is achieved at 1.7-8.7 g/m^3 concentration of H_2SO_4. Increase of initial fog concentration above 5 g/m^3 leads

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to a gradual decrease in coagulation. Plot of coagulation degree vs. the time of sounding resulted in S-shaped curves. By changing the character of sound, it was found that conditions for formation of stationery sound waves are more favorable (time of sounding can be shortened 1.5 times for ~ 100% coagulation). There are 5 figures; 2 tables; and 27 references, 8 Soviet, 3 German, 1 French, 1 Japanese, 4 U.K., 8 U.S., 2 unidentified.* The 5 most recent U.K. and U.S. references are: R. T. Hueter, R. H. Bolt, Sonics Techniques for Use of Sound and Ultrasound in Engineering and Science, N. Y. (1955); Melvin Nord, Chem. Eng., 116 (1950); E. K. Neuman, L. Norton, Chem. Eng. Progr. Symp., 1, 47, 4 (1951); E. Brum, R. M. G. Boucher, J. Acoust. Soc. Am., 29, 5, 573 (1957); H. W. Danser, E. P. Neuman, Ind. Eng. Ch., 41, 2439 (1949).

SUBMITTED: June 13, 1959

* Abstracter's note: The unidentified references are: L. Pimonov, Anan. Telecommun., 6, 1, 25 (1951); 6, 11, 337 (1951); J. Hartmann, The Acoustic Air Jet Generator, Ingeniorvidenskabelige Schrifter, 4 (1939).

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VARLAMOV, M.L.; KRICHEVSKAYA, Ye.L.; ENNAN, A.A.; KOZAKOVA, L.M.; MANAKIN, G.A.

Acoustic coagulation of a fog containing fluorine compounds. Zhur. prikl. khim. 34 no.1:78-84 Ja '61. (MIRA 14:1)

1. Kafedra tekhnologii i avtomatizatsii khimicheskikh proizvodstv Odesskogo politekhnicheskogo instituta.
(Ultrasonic coagulation) (Fluorine)

VARLAMOV, M.L., doktor tekhn. nauk, prof.; KRICHEVSKAYA, Ye.L.; KOVNATSKAYA, B.S.; MANAKIN, G.A.; LIMONOV, V.Ye.; ENNAN, A.A.; KOZAKOVA, L.M.; ZBROZHEK, L.S.

Study of the absorption towers of the granulation shops of a superphosphate plant. Nauch. zap. Od. politekh. inst. 40: 62-72 '62. (MIRA 17:6)

[illegible] ,M.

VARLAMOV, M. L., [illegible], G. A., BREITBARD, G. Ya., GOSPODINOV, A. N., IVANOV, N. A. KRICHEVSKAYA, [illegible] M., and STARCSELSKIY, Ya. I.

"Investigation of a Hartmen Gas-Jet Generator and Its Application in Accustic Coagulation of a Sulfuric Acid Mist."

Paper presented at the 4th All-Union Conf. on Acoustics, Moscow, 26 May - 2 Jun 58.

KRICHEVSKAIA, E. R., ROSENBLATT, M. S., EMUK, B. F.

Importance of examination of gastric and bronchial lavage for tubercle bacilli. Probl. tuberk., Moskva No. 3, May-June 50. p. 9:12

1. Of the Scientific-Research Institute for Tuberculosis in Odessa (Director—Docent Ya. I. Rozenblit).

CLML 19, 5, Nov., 1950

OSHAROV, P.; PAGIN, V.; TESLYA, Ye., inzh.; CHERNOVA, Ye.; KOPTEV, A.; LAZUTIN, P.; ANISHCHENKOV, T., instruktor; TOKAREV, S.; BERSON, S.; KRICHEVSKIY, A.

They have too far to go. Sov. profsoiuzy 18 no.5:40-41 Mr '62. (MIRA 15:3)

1. Reydovaya brigada zhurnala "Sovetskiye profsoyuzy". 2. Krasnoyarskiy krayevoy komitet profsoyuza rabochikh stroitel'stva i promyshlennosti stroymaterialov (for Koptev). 3. Posadchik prokatnogo tsekha zavoda "Sibelektrostal'" (for Lazutin). 4. Krasnoyarskiy krayevoy komitet profsoyuza rabotnikov mestnoy promyshlennosti i kommunal'nogo khozyaystva (for Anishchenkov). 5. Zaveduyushchiy lektorskoy gruppoy Krasnoyarskogo krayevogo soveta profsoyuzov (for Tokarev). 6. Zaveduyushchiy otdelom krayevoy gazety "Krasnoyarskiy rabochiy" (for Berson). 7. Spetsial'nyy korrespondent zhurnala "Sovetskiye profsoyuzy" (for Krichevskiy).

(Krasnoyarsk--City planning)

KRICHEVSKIY, A.

Baku. Stroitel' 2 no.8:3-5 Ag '56. (MLRA 9:12)
(Baku--Building)

KRICHEVSKIY, A., kinooperator

See the film "Steps of the seven-year plan." Sov.foto 21 no.12:18 D '61. (MIRA 14:12)

1. TSentral'naya studiya dokumental'nykh fil'mov na vystavke "Semiletka v deystvii".
(Motion pictures, Documentary)

KRICHEVSKIY, A. (g. Gor'kiy)

Rimma Cherkasova's helpers. Sov. profsoiuzy 18 no.20:26 O '62. (MIRA 15:10)

(Gorkiy—Trade unions—Officers)

MIKHAYLOVA, T., dotsent; KRICHEVSKIY, A. (Orel)

Friendship between a factory and an institute. Sov. profsoiuzy 18 no.2:31 Ja '62. (MIRA 15:4)

1. Pedagogicheskiy institut, g. Orel (for Mikhaylova).
2. Spetsial'nyy korrespondent zhurnala "Sovetskiye profsoyuzy". (Orel--Evening and continuation schools)